UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/516,672	08/08/2005	Helmuth Schulze-Trautmann	24581N2/PCT	5286

20311 7590 10/02/2008

LUCAS & MERCANTI, LLP
475 PARK AVENUE SOUTH
15TH FLOOR
NEW YORK, NY 10016

EXAMINER	
BOYER, RANDY	

ART UNIT	PAPER NUMBER
1797	

MAIL DATE	DELIVERY MODE
10/02/2008	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/516,672	SCHULZE-TRAUTMANN ET AL.	
	Examiner	Art Unit	
	RANDY BOYER	1797	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *16 May 2008*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *25-29,31-46 and 51-53* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *25-29,31-46 and 51-53* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Response to Amendment

1. Examiner acknowledges Applicant's response filed 16 May 2008 containing amendments to the claims and remarks.

2. Claims 25-29, 31-46, and 51-53 are pending. Claims 51-53 are newly added.

3. The previous rejections of claims 32 and 45 under 35 U.S.C. 112, second paragraph are withdrawn in view of Applicant's amendment to the claims.

4. The previous rejections of claims 25-29 and 31-46 under 35 U.S.C. 102(b) in view of Wittenbrink (WO 01/74969 A2) are withdrawn in view of Applicant's amendment to the claims.

5. The previous rejections of claims 25-29 and 31-46 under 35 U.S.C. 103(a) in view of Wittenbrink (WO 01/74969 A2) are maintained. Likewise, the previous rejections of claims 25-29 and 31-46 under 35 U.S.C. 102(e) and 35 U.S.C. 103(a) in view of Hoek (US 2004/0199040) are maintained. Finally, the previous rejections of claims 25-27, 29, and 31-46 on the basis of nonstatutory obviousness-type double patenting are maintained. The rejections follow.

Claim Rejections - 35 USC § 102 / 35 USC § 103

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office Action:

> A person shall be entitled to a patent unless –

> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office Action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

8. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

9. Claims 25-29, 31-46, and 51-53 are rejected under 35 U.S.C. 102(e) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Hoek (US 2004/0199040). Alternatively, claims 25-50 are rejected under 35 U.S.C. 102(e) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Hoek (US 2004/0199040), as evidenced by Eilers (EP 668342 A1) and/or Bertaux (EP 776959 A2).

10. With respect to claim 25, Hoek discloses a microcrystalline paraffin as solid product, prepared by catalytic hydroisomerization of FT paraffins (see Hoek, Abstract; and page 2, paragraph 15).

Hoek does not explicitly disclose wherein the FT paraffins have a carbon chain length distribution in the range from 20 to 105 at temperatures above 200°C; or wherein the catalytic hydroisomerization occurs in the presence of a β-zeolite catalyst.

However, Hoek discloses wherein the feed material for production of the microcrystalline paraffins is obtained from a FT synthesis process, e.g. that described by Eilers and Bertaux (see Hoek, page 2, paragraph 15). In this regard, Examiner notes that the FT synthesis processes disclosed by both Eilers and Bertaux produce paraffins having a carbon chain length distribution greater than 20 (see Eilers, page 6, lines 12-23) (see Bertaux, column 3, lines 15-29). In addition, Hoek that a preferred hydroisomerization catalyst is one such as that disclosed in EP-A-776959 [Bertaux] (see Hoek, page 1, paragraph 13). In this regard, Examiner notes that Bertaux discloses a β-zeolite hydroconversion catalyst (see Bertaux, column 4, lines 27-36).

Therefore, Hoek (by reference to both Eilers and Bertaux as sources of acceptable feed material; and by reference to Bertaux as disclosure of a preferred catalyst) inherently discloses wherein the FT paraffin feed material has a carbon chain length distribution of greater than 20, and wherein the catalyst is a β-zeolite.

11. With respect to claim 26, Hoek discloses wherein the paraffin has a needle penetration value of less than 10 mm (see Hoek, Table 1).

12. With respect to claims 27 and 28, Hoek discloses wherein the paraffin is substantially free of aromatics, heterocyclic compounds, and naphthenes (see Hoek, page 2, paragraph 19).

13. With respect to claim 29, Hoek discloses wherein the paraffin has a proportion by weight of isoalkanes greater than that of normal alkanes in the paraffins (see Hoek, page 2, paragraph 19; and Table 1).

14. With respect to claim 31, Hoek discloses a process for preparing a microcrystalline paraffin by catalytic hydroisomerization comprising the steps of: (a) use of FT paraffins as starting material, having greater than 20 carbon atoms (see discussion *supra* at paragraph 10); (b) use of a β-zeolite catalyst (see Hoek, page 1, paragraphs 6-8) (see discussion *supra* at paragraph 10); (c) use of a process temperature above 200°C (see Hoek, page 1, paragraph 7); and (d) action of pressure in the presence of hydrogen (see Hoek, page 1, paragraph 7).

15. With respect to claims 32 and 41, Hoek discloses the use of *any* suitable amorphous silica-alumina carrier (e.g. a zeolite) with a majority of pores having diameters in the mesoporous range as a support material for a metal of transition group 8 (see Hoek, page 1, paragraphs 8-10).

16. With respect to claims 33-37, Hoek discloses wherein the process may be carried out at temperatures in the range of 230°C to 270°C and pressures in the range of 3 MPa to 8 MPa (see Hoek, page 1, paragraph 7).

17. With respect to claims 38 and 39, Hoek discloses wherein the feed ratio of hydrogen to FT paraffin may be in the range of 250:1 to 600:1 m^3/m^3 (see Hoek, page 1, paragraph 7).

18. With respect to claims 40 and 51, Hoek is not specifically limited with respect to the amount of catalyst to be used (see Hoek, entire disclosure).

19. With respect to claims 42-44, and 52, Hoek discloses wherein the catalyst may be platinum with a metals contents of between 0.1 wt% and 2.0 wt% (see Hoek, page 1, paragraph 8).

20. With respect to claims 45, 46, and 53, Hoek discloses wherein the FT paraffin used has a solidification point of 60°C or greater (see Hoek, page 1, paragraph 14) and wherein short-chain constituents may be removed prior to the step of hydroisomerization (see Hoek, page 2, paragraph 17; and Example 1).

Claim Rejections - 35 USC § 103

21. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office Action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

22. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

23. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

24. Claims 25-29, 31-46, and 51-53 are rejected under 35 U.S.C. 103(a) as obvious over Wittenbrink (WO 01/74969 A2).

25. With respect to claim 25, Wittenbrink discloses a microcrystalline paraffin as solid product, prepared by catalytic hydroisomerization of FT paraffins having a carbon chain length distribution greater than 20 (see Wittenbrink, Abstract; and page 5, first paragraph).

Wittenbrink does not explicitly disclose wherein the hydroisomerization occurs in the presence of a β-zeolite catalyst.

However, Wittenbrink discloses wherein the hydroisomerization catalyst support may be *any* zeolite (see Wittenbrink, page 8) ("*The support for the metals can be any* refractory oxide or *zeolite* or mixtures thereof.") (emphasis added).

Therefore, Examiner finds Applicant's recitation for use of a "β-zeolite" catalyst to be of no patentable consequence in view of the fact that Wittenbrink clearly discloses that *any* zeolite may be used.

26. With respect to claim 26, Wittenbrink discloses wherein the paraffin may have a needle penetration value of less than 10 mm (see Wittenbrink, Table 2).

27. With respect to claims 27 and 28, Wittenbrink discloses wherein the paraffin is free of aromatics, heterocyclic compounds, and naphthenes (see Wittenbrink, entire disclosure; and page 6, second paragraph).

28. With respect to claim 29, Wittenbrink discloses wherein the paraffin is created via a process for hydroisomerization (see Wittenbrink, pages 6-10).

29. With respect to claim 31, Wittenbrink discloses a process for preparing a microcrystalline paraffin by catalytic hydroisomerization comprising the steps of: (a) use of FT paraffins as starting material, having greater than 20 carbon atoms (see Wittenbrink, page 5, paragraph 1); (b) use of a zeolite catalyst (see Wittenbrink, page 8, second paragraph) (see discussion *supra* at paragraph 25); (c) use of a process temperature above 200°C (see Wittenbrink, page 7, second paragraph); and (d) action of pressure in the presence of hydrogen (see Wittenbrink, page 7, second paragraph).

30. With respect to claims 32 and 41, Wittenbrink discloses the use of any zeolite catalyst support (see Wittenbrink, page 8, second paragraph).

31. With respect to claims 33-37, Wittenbrink discloses wherein the process may be carried out at temperatures in the range of 230°C to 270°C and pressures in the range of 3 MPa to 8 MPa (see Wittenbrink, page 7, second paragraph).

32. With respect to claims 38 and 39, Wittenbrink discloses wherein the feed ratio of hydrogen to FT paraffin may be in the range of 250:1 to 600:1 m^3/m^3 (see Wittenbrink, page 8, table).

33. With respect to claims 40 and 51, Wittenbrink is not specifically limited with respect to the amount of catalyst to be used (see Wittenbrink, entire disclosure).

34. With respect to claims 42-44 and 52, Wittenbrink discloses wherein the catalyst may be platinum with a metals contents of between 0.5 wt% and 20 wt% (see Wittenbrink, page 8, second paragraph).

35. With respect to claims 45, 46, and 53, Wittenbrink discloses wherein the FT paraffin used has carbon atoms of 20 or greater and wherein short-chain constituents may be removed prior to the step of hydroisomerization (see Wittenbrink, page 6, second and third paragraphs).

Double Patenting

36. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See e.g., *In re Berg*, 140

F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

37. Claims 25-27, 29, and 31-53 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-21 of copending Application No. 10/477910. Although the conflicting claims are not identical, they are not patentably distinct from each other because claims 25-27, 29, and 31-50 of the instant application are substantially similar to claims 1-21 of copending Application No. 10/477910 in terms of both subject matter and scope.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

Response to Arguments

38. Applicant's arguments filed 16 May 2008 have been fully considered but they are not persuasive.

39. Examiner understands Applicant's principal arguments to be:

I. Wittenbrink does not disclose use of zeolites as a catalyst basis, let alone the β-zeolites claimed.

II. Hoek is completely silent with regard to the use of zeolites or the β-zeolite catalysts.

III. Applicants request that the nonstatutory obviousness-type double patenting rejection be held in abeyance until such time that there is an indication of allowance of the '910 application.

40. With respect to Applicant's first argument, Wittenbrink discloses wherein the hydroisomerization catalyst support may be *any* zeolite (see Wittenbrink, page 8) ("*The support for the metals can be any* refractory oxide or *zeolite* or mixtures thereof.") (emphasis added).

41. With respect to Applicant's second argument, Hoek looks to Bertaux (EP 776959 A2) as a source of preferred catalyst (see Hoek, paragraph 13). In this regard, Examiner notes that Bertaux discloses a β-zeolite hydroconversion catalyst (see Bertaux, column 4, lines 27-36).

42. With respect to Applicant's third argument, such proposed action is only relevant in the situation where (1) there are copending applications and (2) an obviousness-type double patenting (ODP) rejection has been made in both applications. See MPEP §§ 822.01 and 1490(V)(D).

In the present case, however, while the instant application is copending with Application No. 10/477910, there has been no ODP rejection made in Application No. 10/477910. Furthermore, Examiner notes that Application No. 10/477910 is not before the Examiner for consideration (i.e. it is on the docket of *another* (different) examiner). Therefore, a terminal disclaimer is required to overcome the provisional double patenting rejections.

Conclusion

43. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

44. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Randy Boyer whose telephone number is (571) 272-7113. The examiner can normally be reached Monday through Friday from 10:00 A.M. to 7:00 P.M. (EST).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Glenn A. Caldarola, can be reached at (571) 272-1444. The fax number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

RPB

/Glenn A Caldarola/

Acting SPE of Art Unit 1797